



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/630,902	08/02/2000	Jayant D. Patel	7784-000135	7985

7590 10/03/2003  
Harness Dickey & Pierce PLC  
PO Box 828  
Bloomfield Hills, MI 48303

EXAMINER

HOOK, JAMES F

ART UNIT	PAPER NUMBER
----------	--------------

3752

DATE MAILED: 10/03/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/630,902

Applicant(s)

PATEL, JAYANT D.

Examiner

James F. Hook

Art Unit

3752

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 11 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-4, 7, 9-15 and 18-29 is/are pending in the application.
- 4a) Of the above claim(s) 9-15 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 27 is/are allowed.
- 6) ☒ Claim(s) 1-4, 7, 18-26, 28 and 29 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Election/Restrictions***

It is noted that an RCE is filed in this application, and by rule the original restriction requirement still stands, and since applicant lists the non-elected claims as withdrawn in the amendment filed on September 11, 2003, then the application will be examined based upon the originally elected claims set forth in the election made in paper 4 filed on January 8, 2002.

### ***Specification***

The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: "thermoplastic elastomer", "thermoset fiber reinforced material", and "co-continuous" as set forth in newly presented claims 28 and 29.

The amendment filed September 11, 2003 is objected to under 35 U.S.C. 132 because it introduces new matter into the disclosure. 35 U.S.C. 132 states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows: a "thermoplastic elastomer" is never set forth in the original specification, only thermoplastics and elastomers but not thermoplastic elastomers, the word "thermoset" never appears in the original specification either, and since such is a very broad term, as is thermoplastic elastomers, such cannot be substituted for a few named materials and be supported by the specification, the new terms are too broad and would include

Art Unit: 3752

other materials not previously set forth in the specification, and the word "co-continuous" also does not appear in the original specification and cannot be easily interpreted as such from the original application including the drawings when the drawing believed appropriate to the new claim language does not show such a feature readily.

Applicant is required to cancel the new matter in the reply to this Office Action.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 28 and 29 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. "thermoplastic elastomer", "thermoset fiber reinforced material", and "co-continuous" do not appear in the specification as set forth above.

Claim 7 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In claim 1, from which claim 7 depends, it is set forth that the end portion is received in the second portion, however claim 7 then recites that the diameter of the end portion is approximately equal to an outside diameter of the support

Art Unit: 3752

collar which in claim 1 is coupled to the outer perimeter of the second portion.

Therefore it is impossible for the collar to be on the outside of the second portion and still have the diameter of the end portion being approximately equal to the outside diameter of the support collar when the end portion is now being claimed in claim 1 to be inside of the second member. The end portion would have to be small enough to fit within the second portion, and such would then have the second portion provided between the support collar and the end portion which would mean that the support collar has to be considerably larger than the diameter of the end portion, at least the bigger by the thickness of the second portion. Therefore, it is considered to be impossible for claim 7 to modify claim 1 in any way without creating an indefinite situation which renders the scope of the claim impossible to determine. Based upon this rejection, there can be no art rejection on claim 7 at this time since it is now impossible to apply art to the claims when such is a physically impossible modification. This is not a suggestion that because no art was applied to claim 7 that it is in any way allowable over the prior art of record.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-4 are rejected under 35 U.S.C. 102(b) as being anticipated by Sorg.

Art Unit: 3752

The patent to Sorg discloses the recited duct assembly for coupling a pair of components 9 and 11 in fluid connection comprising a first portion 4 having an end portion, a second portion 2 in fluid connection with the first portion, the second portion is more flexible than the first portion, the end of the first portion being received into the second portion, the second portion includes a reinforcing helix 7 bonded to the second portion by sleeves 8 which form discrete support collars coupled to the outer perimeter of the second portion, the support collar covers the connection between the first and second portions and would inherently prevent the formation of a stress riser at this intersection to render the intersection less susceptible to tearing in response to repeated flexing of the second portion, the support collar has a cross section which is considered to be generally a flat base with a circular cross section and is considered hollow to receive the second portion therein.

Claims 18, 20, 21, and 24 are rejected under 35 U.S.C. 102(b) as being anticipated by Ziebold. The patent to Ziebold discloses the recited apparatus and method of forming a hose assembly for coupling a plurality of components comprising forming a rigid duct structure 12, 14 and a flexible duct structure 20, and bonding the flexible duct structure to an end of the rigid structure using sleeves 16, 18 welded thereto to produce a clampless flexible fluid connection that permits the end of the flexible duct structure opposite the rigid duct structure to be moved relative to the rigid duct structure, the flexible duct structure includes a plurality of bellows and a reinforcing member 22 where the duct structure is formed of metal.

Art Unit: 3752

Claims 18-20 and 24-26 are rejected under 35 U.S.C. 102(b) as being anticipated by Pfleger. The patent to Pfleger discloses the recited apparatus and method of forming a hose assembly for coupling a plurality of components comprising forming a rigid duct structure 6 made of plastics and a flexible duct structure 7 made of thermoplastic elastomers, and bonding the flexible duct structure to an end of the rigid structure to produce a clampless flexible fluid connection that permits the end of the flexible duct structure opposite the rigid duct structure to be moved relative to the rigid duct structure, the flexible duct structure includes a plurality of bellows 8, added sleeves 2 and 3 can be provided to help connect the two structures together where elastomers can be used and the sleeves are bonded to the structures, the rigid duct structure can be made of plastics, first and second rigid duct structures are provided and are connected by the flexible duct structure forming fluid connections including the sleeve portion mentioned above.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 21-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pfleger in view of Timmons. The patent to Pfleger discloses all of the recited structure with the exception of providing the flexible bellows portion with a thermoplastic reinforcing member, and providing the rigid portion with a beaded end. The patent to

Art Unit: 3752

Timmons discloses the recited method of forming a hose comprising a rigid duct structure 105 which is inherently more rigid than the flexible portion 101 provided with convolutions to allow flexing of that portion, where the flexible portion is provided with a reinforcement 153 which can be made of a thermoplastic material, typically nylon, and where the rigid portion can be provided with a beaded end as seen just to the left of the dashed line near reference numeral 161 and can be formed of a plurality of reinforced layers that overlap with the corrugated portion. It would have been obvious to one skilled in the art to modify the method of forming a hose in Pflieger by providing a thermoplastic reinforcement on the flexible portion to give it some resistance to collapse, and to provide a beaded end portion as suggested by Timmons to allow for a better seal at a connection of the rigid portion to another object.

Claims 28 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pflieger in view of Timmons and Tally. The patent to Pflieger discloses all of the recited structure with the exception of providing a thermoplastic helix bonded to a flexible portion, and forming a second tube shaped portion of a thermoset fiber reinforced material having one or more layers. It would have been obvious to one skilled in the art to modify the method of forming a hose in Pflieger by providing a thermoplastic reinforcement on the flexible portion to give it some resistance to collapse, and to provide a plurality of layers at the rigid portion that are reinforced by fibers as suggested by Timmons to insure the rigid portion stays connected to the flexible corrugated portion. The patent to Tally discloses that when forming tubes for use in coolant conduits such as Pflieger, that plastics and thermoset plastics can be



Art Unit: 3752.

used to insure the section keeps its shape in use. It would have been obvious to modify the plastic material used for the rigid portion of Pfleger by substituting a thermoset material to insure that the rigid portion retains its shape when in use as suggested by Tally.

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The patent to Noone disclosing a state of the art hose having rigid and flexible portions.

### ***Response to Arguments***

Applicant's arguments with respect to claims 1-4, 18-26, 28 and 29 have been considered but are moot in view of the new ground(s) of rejection.

### ***Allowable Subject Matter***

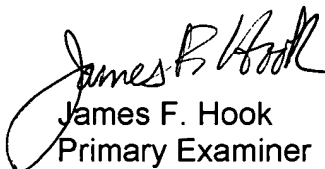
Claim 27 is allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James F. Hook whose telephone number is (703) 308-2913. The examiner can normally be reached on Monday to Wednesday, work at home Thursdays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Mar can be reached on (703) 308-2087. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Art Unit: 3752

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0861.



James F. Hook  
Primary Examiner  
Art Unit 3752

JFH